REMARKS

Claims 1-18, 21-23, 30, and 31 are pending. Claims 1, 7, 8, 10, 15, and 16 have been amended, claims 19, 20, and 24-29 have been canceled, and new claims 30 and 31 have been added to recite features similar to those of allowable claim 20 depending from claims 1 and 10 respectively.

Applicants submit that entry of this paper is proper, as the amendments presented herein raise no new issues requiring further searching or consideration by the Examiner and because the number of claims added do not cause the total number of claims to exceed the number of finally rejected claims.

In the Final Office Action, claim 20 was indicated to be allowable if rewritten into independent form to recite the features of their base and intervening claims. Equivalently, claim 16 has been rewritten to recite the features of claims 19 and 20. Applicants submit that these amendments are sufficient to place claim 16 and its dependent claims into condition for allowance.

Claims 1-19 and 21-23 were rejected under 35 USC § 103(a) for being obvious based on a combination of the Replay Gain standard, the article entitled MP3 Gain version 0.9.7, and the ISO 11172-3 article. Applicants request withdrawal of this rejection for the following reasons.

Claim 1 recites that the temporarily stored audio data includes scale factors of sub-bands of audio frames of the audio file. In addition to these features, claim 1 has been amended to recite that the scale factors are used to obtain "the output level of the temporarily stored audio data as an indication of an average volume of the audio file, the gain of the audio amplifier

adjusted to cause the average volume to correspond to a volume level set by a user." These features are not taught or suggested by the cited references, whether taken alone or in combination.

The Replay Gain standard adjusts the output volume of an mp3 file based on a peak value stored in a header of that file. The MP3Gain article discloses performing a pseudo-implementation of the Replay Gain standard which maintains a same volume for every song read from a CD. However, neither reference teaches or suggests that the temporarily stored audio data includes scale factors of sub-bands of audio frames as recited in claim 1.

The ISO article discloses an audio decoding process which divides a bit stream into slots (§ 2.4.3.1), reads bit allocation information for sub-bands included in the bit stream, and then reads scale factors for the sub-bands having a non-zero bit allocation. (See § 2.4.3.2). These scale factors are different from the scale factors of the claimed invention.

The scale factors disclosed in the ISO article are used to convert a bit stream in one format into a bit stream of another format, which, for example, may correspond to the format of a digital video or audio player. In order to perform this conversion, the bit stream (received in one format) is requantized so that it conforms to the format of the player. The scale factors disclosed in the ISO article assist in performing this requantization.

The ISO article makes this evident. As disclosed in § 2.4.3.2 and § 2.4.3.3 of the ISO article, the bit stream conversion process involves decoding a received bit stream by sampling the stream in each of a plurality of sub-bands, reading a scale factor included in the bit stream

for each sub-band, generating a requantized value for each sub-band, and then rescaling the requantized value for each sub-band based on the corresponding scale factor. The scaled requantized values are then applied to decode the bit stream into a format suitable for output on the player.

The ISO scale factors, therefore, are used for a very different purpose than recited in claim 1. The scale factors of claim 1 are used "to obtain the output level of the temporarily stored audio data as an indication of an average volume of the audio file, the gain of the audio amplifier adjusted to cause the average volume to correspond to a volume level set by a user." In contrast, the scale factors of the ISO article are used to convert a bit stream from one format into another during a requantization process. The ISO article does not teach or suggest using its scale factors to obtain an output level of its bitstream, as an indication of average volume of that stream, for purposes of adjusting the gain of an audio amplifier to correspond to a volume level set by a user.

Based on these differences, it is respectfully submitted that claim 1 is allowable over the cited combination. Furtherance of claim 1 and its dependent claims to allowance is respectfully requested.

Claim 10 has been amended to recite features similar to those which patentably distinguish claim 1 from the cited combination. Applicants therefore submit that claim 10 and its dependent claims are also allowable.

New claims 30 and 31 have been added to recite features similar to those of allowable claim 20 depending from claims 1 and 10 respectively.

In view of the foregoing amendments and remarks, it is respectfully submitted that this application is in condition for allowance. Favorable consideration and timely allowance of the application is respectfully requested.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

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